

CALIFORNIA ACADEMY OF SCIENCES.

THE
PRESIDENT'S ANNUAL ADDRESS,

DELIVERED JANUARY 5, 1874,

THE CONSTITUTION,

ADOPTED MAY 15, 1871,

OFFICERS for 1874,

AND

Members January 5, 1874.

SAN FRANCISCO :

EDWARD BOSQUI & Co., PRINTERS, LEIDESDORFF STREET.

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PRESIDENT'S ADDRESS.

The past year has been a notable one in the history of the Academy. The appeals which our labors have made to the citizens of San Francisco have yielded the most gratifying fruits. We commence the New Year with fresher inspirations, and with stronger assurances of raising the Academy to the highest possible position for good. A deep interest has been manifested in our proceedings, as fully exhibited by the large attendance of members and their friends, by the liberality of our associates, and by the calls for our proceedings.

Since the revivifying of the Academy in 1866, we have steadily moved forward, imbued with faith in the ultimate development of scientific knowledge and tastes upon this coast, even where so many elements are in direct conflict with it. Although we are not in a position to-day to make absolute promises, we yet see broad daylight opening upon our struggles for scientific life. Almost within our reach has arisen what we have so ardently and persistently toiled for.

Two years since, our balance sheet showed about one hundred dollars in the Treasury, yet the unpaid bills indicated a much larger sum in arrears. Last year we had in hand a balance of \$1,568, less the amount required for the printing of the proceedings of the year. To-day we have \$3,000 invested, and about \$1,400 in hand, subject to the bills for the reprinting of the first volume of the Academy's proceedings. And this notwithstanding we have paid for the partial services of the Director of the museum; purchased cases for the museum and library; added books to the library, specimens to the cabinet; and incurred an unusual expense for printing and engraving. In fact, our expenditures have been nearly \$3,000.

Our membership has increased in a very satisfactory degree.

There have been elected 38 life members—two of them for their services to the Academy (Stearns and Lick); 100 resident members; 116 corresponding members. We have lost two by death, two by resignation; four have changed to life membership; five to corresponding membership; and twelve have been dropped by non-payment of dues. Our total membership is now 63 life members; 254 resident members; 20 honorary, of whom 10 are American, and 10 foreign; and 116 corresponding members. In this increase the anticipations of last year have been more than realized. Then it was hoped that with a maintained interest in scientific work, we should have by this time not less than 225 resident members. Of course, in so large a number there is a percentage of members that are in arrears for dues, and the Treasurer announces that his collections for resident members' dues now amount to about \$200 per month. For part of the year the income from interest upon loan was \$195; from regular dues, \$2,100; while from life members was received the handsome sum of \$3,500.

During the year we have lost by death two of our resident members, E. Dennison and W. P. Prichard; and two of our honorary members, John Torrey and Louis Agassiz, both so lately our guests. The services which the Academy conducted in memory of the latter are still fresh in your recollection. We can hardly expect to increase our membership in succeeding years in the same ratio that we have during the present, but we shall endeavor to awaken among our younger men an interest in our work and investigations. In the ordinary course of nature they must succeed to our places, and it is our duty to use every effort to induce them as early as practicable to share in the labors we have initiated.

The preparation of the material for the volumes of the proceedings of the past, as well as of the preceding year, has fallen almost entirely upon Mr. Stearns, of the Publication Committee, and whilst he can best inform you of the quantity that has been published, the members cannot know the months of personal attention and supervision which he has unselfishly given to it; and only those conversant with the vexatious trials of the proof reading of technical papers can appreciate the care and attention which every line and every word demands. In addition to the two parts of the proceedings of this year, the Trustees directed the republication of the first volume of the proceedings of the Academy, now

out of print. This has been supervised by Mr. Stearns, and the plates engraved under his eye and direction.

As an account-current of the activity and prosperity of the Academy, it is pertinent in this place to note what has been printed since its organization in April, 1853. At the close of 1857, four and a half years after its birth, the first volume of its proceedings was completed, with 110 pages. The second volume, which was completed in 1862, embraced 236 pages, with index. At the close of 1867 was completed the third volume, in five parts, comprising 411 pages, without plates. During 1867 was also published Mr. Lesquereux' Mosses of the Pacific Coast, 38 pages, quarto; and Richthofen's Natural System of the Volcanic Rocks, 94 pages, quarto. At the close of 1872 was completed the fourth volume, in five parts, comprising 322 pages, with the plates. During the past year there have been published the first two parts of Volume V, comprising 243 pages, with illustrations through the text, and 12 plates. Also the republication of the first volume, embracing 126 pages and 6 plates.

The labors of the Recording Secretary have been faithfully performed, and involved a large amount of work, as he not only acts as Secretary to the Academy, but also to the Board of Trustees. The extent of the proceedings already noted exhibit the increased amount of labor now falling upon that officer, who likewise notifies new members of their election.

The Corresponding Secretary has kept up the duties pertaining to his office, and proper and prompt acknowledgments have been made for donations to the Museum and Library.

The Treasurer merits our thanks and commendation as in previous years, because he has so pertinaciously, but good-naturedly, followed us with his bills. If we are to live we must pay. By order of the Trustees I was directed to examine the bills of this officer, and his entries for the year; and at a special adjourned meeting on the 3d of January had the pleasure of reporting them correct.

In April the Director of the Museum was appointed by the Trustees to keep open the rooms of the Academy three days in each week, for the use of the members and their friends; to label and arrange the specimens already in the Museum, some of which were in a sad state of neglect; and to classify all the current donations

to the Cabinet and Library. For want of room much of the material is boxed up, and cases of the large specimens are on storage in the U. S. Coast Survey building. He has spent part of his time in cleaning, arranging, and classifying the great number of plants which fill our herbarium, and to which much and rich material has been added by our botanical members.

The Trustees have held their regular and several special meetings, for the discussion of questions of government, policy and expenses ; and it is but justice to them to say that there has always been a majority, and frequently all the members present. From time to time I have made known to the Academy the subjects of interest brought before the Board, whenever they could be made public without prejudice to the interests of the institution.

During the year, the additions to the Library, from home and foreign societies, have been about the same as in previous years, and received through the attention and kindness of the Smithsonian Institution, to which we are already so deeply indebted. These donations have all been properly acknowledged, and our proceedings distributed in return. Donations from individuals have been few but of marked value ; and especially are we indebted to our fellow member, George C. Hickox, for the valuable set of Kingsborough's Mexican Antiquities, and to another member, who will not permit his name to be known, the rare voyages of the "Astrolabe" and the "Bonite." Purchases have been comparatively large and comprise valuable scientific works ; and by order of the Trustees, the President, at the beginning of the last year, subscribed to a number of the current journals in various departments of science.

But one of the most important additions to our Library is now *en route* from the Smithsonian Institution. Learning from Mr. Stearns that over two thousand duplicate volumes of the transactions and publications of scientific bodies were in possession of that Institution, the President was directed by the Trustees to solicit them on behalf of the Academy, and Prof. Henry has announced that fifteen boxes containing these books have been despatched to us. In this connection I must call the attention of the Academy to the necessity for obtaining a special fund for binding and for obtaining cases for the volumes to arrive. We cannot always work in such limp covers ; it is time we obtained better backing.

A library of reference is absolutely necessary, and is now felt as one of our greatest needs, and we must seek for aid to secure it as early as practicable. Much of our material remains undescribed for want of the proper literature, and other societies gather honors from the fields at our own doors.

The Library, as well as the Museum, should be open at all times to the use of every student and investigator, whether connected with the organization or not.

The additions to the Museum have been unusually large, and of great value and interest. Some valuable specimens, such as the sea-lion skeleton, the skin and skeleton of the sea-elephant, now nearly extinct on this coast, a large mass of baleen, etc., have been secured by purchase, but at very low figures. Rare specimens have been presented by our members and friends, and with particular pleasure I commend the interest which has been manifested by our whaling captains in gathering of the rich harvests of the sea. They have so many opportunities for rendering science good service, that I trust we can imbue them with some of our enthusiasm.

Great interest has been manifested in our collections by friends of the Academy far and near, and we have just made such changes in our location as will enable us gradually to exhibit the material which has accumulated, and now begins to come thickly upon us. On this coast we are so favorably located for collecting the skeleton and specimens of the marine mammals of the northwest Pacific, that I am confident we shall acquire a unique collection in that department, not only for exhibition, but for study and description.

I have been greatly exercised upon the probability of our losing one or all of three large special collections in this city in Mineralogy, Conchology and Entomology, which should be secured to the Academy. Agassiz, who had personally examined them while here, and acquainted me with their importance, was negotiating for one of them, before his last illness, and he had expressed himself anxious to obtain them all for the Cambridge Museum of Zoölogy. They should never be allowed to leave this coast; they cannot be replaced in many years, nor without comparatively large sums of money; and I fervently trust that we have men in our city who will stand in the breach and donate them to the Academy, the more especially as they can be obtained for two-thirds their actual value in the East or in Europe. They form invaluable nuclei of well ar-

ranged and classified material for the use of the young and the higher students, and as standards of comparison and reference to the collector and naturalist. The higher students in these special branches would be thus enabled to start his investigations at home with a fund of knowledge, as the young mathematician commences with the wealth of Euclid, and the young astronomer with the doctrine of Copernicus and the exquisite instruments of modern skilled mechanics. To the members who have that enviable power of soliciting aid which will accomplish these and kindred objects I earnestly appeal to cease not urging our claims for substantial assistance. If there is a civilizing element in educating our youth, and developing the higher scientific faculties, it is surely in the very investigations which our organization demands, and which such rich collections foster. We need this help to-day, not in the future, for our final success is certainly assured, in the fact that we are in the pursuit of truth itself, for itself.

If we were quickened into new life a few years since we have this year found the headwaters of perpetual youth. The impulse which Agassiz gave by his personal declarations in our behalf has been crystalized by the munificent donation of James Lick, late of Santa Clara, now of the whole world, and of all time! In February, 1873, unexpectedly to us, he unostentatiously presented the Academy with a deed for a lot fronting 80 feet on Market street, and running to a depth of 275 feet. In July, he presented another deed, adding 40 feet adjacent to the former. These deeds were conditional, but we accepted them without reservation, trusting that the conditions could all be fulfilled. Upon consultation with him, he assured me that his sole and only object was to assist the Academy, in the spirit of the deeds; that he had long contemplated such an act, and that our efforts had satisfied him we had vitality and meant to succeed; so that, if the conditions were judged onerous, or would invalidate his intentions, the terms should be changed. This he did, and on the 3d of October he presented us with a new deed to the first mentioned lot, accompanied with very liberal conditions. This deed was legally accepted by the Trustees, and their act unanimously sustained by the Academy. These facts have all been heretofore recounted and understood by you, and are now mentioned solely as matters in our history.

That James Lick has faith in the objects and success of the Aca-

demy, he has proved by another act in connection with his greatest gift to the cause of the highest of the sciences. It is but a few meetings since he permitted me to announce his intention to appropriate large and ample means to erect and endow an astronomical observatory, with the largest telescope of the most exquisite equipment that the skill of American mechanism can produce. To-day he has authorized me to state that the California Academy of Sciences is to be the Trustee of that Observatory, and that when he undertakes this work he intends that the glass shall be cast and the lenses ground upon the site of the Observatory, not only that the work may be wholly Californian, but because it would be imprudent to incur the risk of transporting across the Continent an object glass so valuable and difficult of replacing. But this is not all. At my request he has permitted me to state, that by his will he has provided ample means for the building and fully equipping of the edifice contemplated and required in his deed of October, and for the purchase of material for the museum. Words of mine fail to convey the gratitude which science owes to such munificence; in his heart and head there is a wealth of love for human nature, and a keen appreciation of the influence of scientific knowledge in humanizing mankind. We can best manifest our whole benefaction by inflexibly carrying out the views which he has expressed in his deed—not in the narrowness of technicalities, but in the broadest liberality of expression.

But until we are able to occupy the edifice which is contemplated and required by the conditions of Mr. Lick's deed, the financial condition of our Treasury and the sympathy of our friends have warranted us in seeking for more commodious accommodations. This the Trustees have steadily kept in view, and have spent much time in personally seeking for a building that would answer our purposes; and I have now the pleasure of announcing to the Academy that on the third of this month, at an adjourned special meeting of the Trustees, to which they invited H. M. Newhall, Esq., they leased from him the church standing on the south-west corner of California and Dupont streets. We were aware that he had been offered a rental of \$400 per month for that building, but with a liberality which we deeply and gratefully appreciate, he has given it to us for \$250 per month, with the condition that he will donate \$100 per month to the Academy as long as we occupy it, whether one, five

or ten years. And in addition thereto, he has given it rent-free for the three months, ending March 31st. Our benefactor, Mr. Lick, has expressed to us his sincere gratification at this act of his friend, Mr. Newhall, and satisfaction that we have now the opportunity to exhibit our collection.

Surely we may say with thankfulness that our many years of unselfish struggling have not been in vain, and that our labors are bearing their legitimate fruit. Yet this liberality brings no respite to our efforts, and duties, and responsibilities ; it but increases them manifold. It means work for the workers ; it demands that the indolent and the weary must brace themselves afresh for the struggle. It multiplies expense, and we must not be backward or lukewarm in seeking aid from others who, at the right moment, need but the prompting, to afford it.

In this connection I desire to mention a circumstance which does credit to the head and heart of another of our members. About one year since, David D. Colton informed me confidentially that he intended to purchase the church before referred to and present it to the Academy ; but, of course, as a prudent business man, he was desirous of obtaining it on the lowest possible terms. Whilst he was in negotiation, James Lick came forward with his munificent gift, which swallowed up all minor things. And let us not forget that our fellow-member, S. C. Hastings, who at once offered to be one of twenty to pay \$10,000 each toward the erection of the building upon Mr. Lick's lot, still holds himself responsible for the amount. Another of our members, John Hewston, Jr., has not withdrawn his promise to me that when we have erected the proposed building, he will equip a chemical laboratory therein at an expense of five thousand dollars.

I could here well close the record of our last year's progress and prospects, but as we are gathering strength, and begin to see our way clearly before us, it is incumbent upon us to reaffirm in a few words what are the higher aspirations and objects of this Academy of Sciences ; and to define and mark out a broad policy which will be pursued so far as the means obtainable will permit, and the demands and discoveries of science suggest.

The primary aim of such an institution is the promotion of science. This must necessarily be accomplished by the pursuit and development of special study in the various branches of science, and

therefore requiring original investigation by specialists in those branches. The discoveries effected by them supply the storehouse of practical and theoretical knowledge for our shops, manufactories, schools, colleges, institutes of technology, and universities. To-day these are utilizing the condensed and correlated science of all previous specialists ; a century hence their successors will be using all that will have been aggregated to their time.

With this ultimate object of special investigations continually in view, we propose to secure adequately endowed FOUNDATIONS FOR ORIGINAL RESEARCH in the different ramifications of science, to be carried on by men chosen for their ability and peculiar fitness for such work ; that when such an organization is effected, or partially effected, these investigators shall, besides announcing their discoveries in the regular proceedings of the Academy, deliver lectures upon their special lines of research, and make known by experiment and illustration what they have discovered, the mode of experiment, and the practical application thereof to art, manufacture, commerce, mining and agriculture.

These foundations shall be known by the name of the endower, so that we will have "The —— Foundation for Original Research in Cosmical Physics"; "The —— Foundation for Original Research in Metallurgy," etc., etc. With such investigators should be associated, as learners and assistants of proved capacity and aptness for such duty, the youth of our highest seats of learning and of the humblest shop and cabin. Small endowments should also be made to enable students of limited means to pursue their special studies. In time they fill the places of the older workers, and spread themselves over the earth as collectors in search of new materials in their favorite studies.

The field of research is illimitable, and the channels of investigation numerous enough to suit and gratify the characteristic mental power of all. The present material wealth of the country has developed from the practical application of scientific knowledge, although the relation may not be apparent to the casual or illogical observer. The future wealth and preëminence of the country will be under still greater obligations for such knowledge, which is daily unfolding. These fields and methods of research afford the largest inducements for the mental activity of our California youth, and for the leisure of the successful man of business, who has gained competency from steady pursuit of manufacture or trade.

The endowments for these "Foundations for Original Research" will necessarily involve, for the use and reference of the investigators and students in science, a museum of large proportions, properly arranged and classified. This it is proposed to open to the public upon specified days of each week, free of charge, and with the fewest possible restrictions.

Pending these endowments, the Trustees propose to secure the services of men eminent in science, to deliver popular science lectures; and the building we are soon to occupy is well adapted for this purpose.

I have the fullest faith in the consummation of our hopes of success in this broad scheme. We have seen millions granted by the wealthy in other countries, and in our own; we have watched the growth of this liberality; and we have tangible proof in the recent munificence of James Lick in our behalf, and of others towards the University of California. It is a subject that might be almost treated by the calculus of probabilities, and the time and amount of each endowment predicted, were not Californians so apt to exceed the most liberal acts and sanguine expectations of all others.

The names of the founders of institutions of learning and benevolence in Europe, inaugurated centuries ago, are familiar to you all; and he who gives of his means, in this age of general intelligence, to endow a foundation for original research, builds for himself a monument which shall be a glory to his descendants, and forever make his name a household word among the mighty and the humble.

CONSTITUTION.

ARTICLE I.

NAME AND OBJECT.

SECTION 1. This Society shall be known as the CALIFORNIA ACADEMY OF SCIENCES.

SEC. 2. The object of this Society is the promotion of science ; and this is to be accomplished by the holding of meetings for scientific intercourse and discussion, by the reading and publication of papers containing original contributions to science, by the establishment of a museum and library, and by other suitable means.

ARTICLE II.

MEMBERS.

SECTION 1. The Academy shall consist of resident, life, corresponding, and honorary members.

SEC. 2. Resident members shall be elected in the manner hereinafter prescribed, from among persons residing within one hundred and fifty miles of San Francisco.

SEC. 3. Any resident member may at any time after his election become a life member, by paying into the treasury of the Academy the sum of one hundred dollars and notifying the Recording Secretary that he desires to be enrolled as a life member. The Trustees shall have the privilege of nominating for election for honorary life membership such members as have rendered valuable services to the Academy ; such elections not to exceed three annually.

SEC. 4. The business of the Academy shall be exclusively managed by, and its officers selected from, the resident and life members.

SEC. 5. Corresponding members shall be elected in the manner hereinafter prescribed, from persons not residing within one hundred and fifty miles of San Francisco ; and any resident member removing from within those limits will become a corresponding member, provided his dues have been paid up to the date of his removal, and he notify the Recording Secretary that such is his wish. Corresponding members will also become resident members on removing to within this distance of San Francisco, and notifying the Recording Secretary to that effect, and that such is their wish. But persons elected as corresponding members, who shall take up their residence within the distance of one hundred and fifty miles from San Francisco, and who shall not desire to be enrolled as resident members, shall cease to be corresponding members from the time of removal. Corresponding members shall have the privilege of visiting the museum and library, and of attending the meetings of the Academy, when in the city, but they shall not have the right to vote or hold office.

SEC. 6. Honorary members shall have all the privileges of resident members, except those of voting and holding office ; they shall not exceed forty in number, twenty of whom shall be residents and citizens of the United States, and twenty of foreign countries.

SEC. 7. Each candidate for resident membership must be proposed in writing, at a stated meeting of the Academy, by at least two other resident or life members ; and the name of the person thus proposed must have been posted in a conspicuous position in the hall of the Academy at least two weeks before he can be balloted for, and such balloting must be at a stated meeting of the Academy. Corresponding members shall be elected in the same way as resident members ; and the number of each of these classes is unlimited. Honorary members shall be elected only at the annual meeting, and must have been proposed by the Trustees at least four weeks before such meeting, and the name of the candidates posted in a conspicuous place in the hall of the Academy. Any candidate for resident, corresponding, or honorary membership must, to be elected, have received the votes of at least four-fifths of the members present ; and no more than one candidate can be balloted for on one ticket.

SEC. 8. No person rejected as a candidate for membership shall be eligible again within one year after the time of such rejection.

SEC. 9. Any person may be expelled from the Academy for cause, and after due hearing, by a vote of at least two-thirds of the members present ; but proceedings for such expulsion can be initiated only at a stated meeting, which may however be adjourned from time to time, but not beyond the time of the next stated meeting after the one at which the proceedings for such expulsion were initiated. No person expelled from the Academy shall ever, under any circumstances, again become a candidate for election to membership.

ARTICLE III.

OFFICERS.

SECTION 1. The officers of the Academy shall be a President, a Vice-President, a Corresponding Secretary, a Recording Secretary, a Treasurer, a Librarian, a Director of the Museum, and seven Trustees.

SEC. 2. The President, Recording Secretary, and Treasurer shall be *ex-officio* Trustees of the Academy.

SEC. 3. The officers shall be elected by ballot, at the annual meeting, on open nomination, and must receive a majority of the votes cast, only one officer being elected at each balloting. The number of Curators shall be designated, and they shall be appointed by the Trustees.

SEC. 4. The President of the Academy, or in case of his absence or inability to serve, the Vice-President, shall preside at the meetings of the Academy, and shall name all committees, excepting such as are otherwise especially provided for. He shall, at the annual meeting, make a report on the condition and progress of the Academy, in all its departments. He shall also, at the annual meeting, announce the deaths of members which may have taken place during the year, and shall accompany such announcement with biographical notices in the case of persons eminent in science.

SEC. 5. The Recording Secretary shall keep a record of the proceedings of the Academy, and of the Trustees ; shall receive and refer to the publication committee the papers presented for publication ; and shall furnish an abstract of the proceedings of the Academy for publication. He shall give suitable notice of the time and place of the meetings of the Academy, whether annual, stated or adjourned. He shall keep a duly classified list of the members, and shall attend to such other business in his department as the Trustees may direct.

The Corresponding Secretary shall attend to the distribution of the publications of the Academy to the resident and other members entitled to the same, and conduct the correspondence with societies and individuals. He shall also notify members of their election, and furnish them with diplomas.

SEC. 6. The Treasurer shall attend to all receipts and disbursements of the Academy, giving such bonds and furnishing such vouchers as the Trustees may require. He shall collect all dues from members, and keep a set of books showing a full account of receipts and disbursements. He shall furnish the Trustees, from time to time, as they may require, with a list of members entitled to vote ; and make a general report, to be laid before the Academy by the President at the annual meeting.

SEC. 7. The Librarian shall have charge of the library, and shall enforce such rules for its management as may be drawn up by the Trustees. He shall furnish a report on the additions to, and condition of the library, to be communicated by the President at the annual meeting.

SEC. 8. The Director of the Museum shall have the general care and oversight of the museum and scientific collections of the Academy, assisted by such Curators as may be appointed by the Trustees. He shall furnish a report on the condition of his department, to be communicated by the President at the annual meeting.

SEC. 9. In case of vacancy caused by the death or resignation of any officer, the fact shall be announced to the Academy by the President, and an election to fill the vacancy shall be had at the next meeting after such announcement shall have been made.

ARTICLE IV.

MEETINGS.

SECTION 1. The annual meeting of the Academy shall be held on the first Monday of January, provided that this is not the first day of the month, in which case the meeting shall be held the succeeding Tuesday. The stated meetings shall be held on the first and third Monday of each month. Field meetings and excursions may be held at such time and place as the Academy may direct. The time of the annual meeting shall be advertised in some newspaper published in San Francisco, at least twice before the day of the meeting.

SEC. 2. Any annual or stated meeting may be adjourned from time to time, for the purpose of closing up unfinished business, but not beyond the time of the next stated meeting.

SEC. 3. In case the Board of Trustees shall deem it desirable, a special meeting may be called at any time by the President, every resident member being notified through the post office, or by advertising in the newspapers.

SEC. 4. Meetings of the Board of Trustees shall be held quarterly: on the second Monday of January, second Monday of April, second Monday of July, and second Monday of October. Meetings of the Board of Trustees may be called at any other time, at the call of the President, every member not absent from the city being duly notified. The President shall also call a meeting of the Board of Trustees whenever requested to do so by any other member of the Board of Trustees.

Four members shall constitute a quorum for the transaction of business.

ARTICLE V.

ASSESSMENTS.

SECTION 1. Resident members shall pay three dollars as an initiation fee, and three dollars per quarter in advance, as their regular contribution toward defraying the expenses of the Academy. The sum paid as an initiation fee shall include the cost of a diploma. The payment of the quarterly dues of the officers shall be left optional.

SEC. 2. No member who shall not have paid his dues, shall take part in the business of the Academy, and the names of members more than one year in arrears shall be stricken from the rolls by the Recording Secretary, and no member thus dismissed from the Academy shall be eligible again until after one year has elapsed from the date of such dismissal.

ARTICLE VI.

PUBLICATIONS.

SECTION 1. The publications of the Academy shall be directed as to their style and amount by the Committee of Publication, under the general supervision of the Trustees.

SEC. 2. The resident, life and honorary members shall be entitled to receive, free of cost, each one copy of all publications issued by the Academy during the time of their membership.

ARTICLE VII.

AMENDMENTS.

SECTION 1. This Constitution may be amended at any stated meeting, by a vote of two-thirds of the members present: but the proposed amendment must have been presented to the Board of Trustees in writing, at least one month before the day of meeting. The Board of Trustees shall present to the Academy any amendment thus offered, with a report on the question of its adoption, and with such amendment as they see fit.

AMENDMENT TO THE CONSTITUTION.

Adopted February 17th, 1873.

The Vice-President shall attend all meetings of the Trustees, and in case of the absence of the President shall preside, and at the same time be entitled to vote.

BY-LAWS.

ARTICLE I.

MEETINGS.

SECTION 1. The weekly and annual meetings of the Academy shall be held on Monday evening at such place as the Academy shall determine; and the hours of meeting shall be as follows: From the first of September to the first of May, at half-past seven; and during the remainder of the year, at eight o'clock in the evening.

ARTICLE II.

RULES OF ORDER.

SECTION 1. The parliamentary rules, as adopted and practised in deliberative bodies in the United States, shall be the rules of order in the transaction of business of this Academy, except so far as these are modified by the Constitution of this Academy.

ARTICLE III.

ORDER OF BUSINESS.

1. Reading of the minutes of the previous meeting.
2. Reports of Investigating Committees.
3. Election and reception of new members.
4. Propositions for membership.
5. Donations to the cabinet.
6. Donations to the library.
7. Written communications.

8. Verbal communications.
9. Reports of Standing Committees.
10. Reports of Special Committees.
11. Unfinished business.
12. Reports of officers.
13. Election of officers.
14. New business.
15. Adjournment.

ARTICLE IV.

AMENDMENTS.

SECTION 1. The By-Laws of this Academy may be altered or amended at any regular meeting, by a two-thirds vote; provided that the proposition for such amendment or alteration shall have been presented and filed with the Recording Secretary, at least two weeks previous to taking a vote thereon, and published by the Recording Secretary at each intervening meeting.

AMENDMENT TO THE BY-LAWS.

ADOPTED FEBRUARY 5, 1872.

The officers of this Society are prohibited from incurring any indebtedness on behalf of this Society, unless authorized by the Board of Trustees, or by a vote of this Academy at a regular meeting.

OFFICERS.

PRESIDENT.

GEORGE DAVIDSON.

VICE-PRESIDENT.

JOHN HEWSTON, JR.

CORRESPONDING SECRETARY.

R. E. C. STEARNS.

RECORDING SECRETARY.

CHARLES G. YALE.

TREASURER.

ELISHA BROOKS.

LIBRARIAN.

HERMAN BEHR, M.D.

DIRECTOR OF THE MUSEUM.

H. G. BLOOMER.

TRUSTEES.

D. D. COLTON,

GEORGE E. GRAY.

ROBERT E. C. STEARNS,

HENRY EDWARDS,

OLIVER ELDRIDGE,

THOMAS^{P.} MADDEN,

A. B. STOUT, M. D.,

AND THE PRESIDENT,

VICE-PRESIDENT,

TREASURER, AND

RECORDING SECRETARY, *Ex-Officio*.

CURATORS.

<i>General Zoology</i> ,	-	-	-	-	-	GEORGE HEWSTON, M. D.
<i>Icthyology</i> ,	-	-	-	-	-	W. H. DALL.
<i>Conchology</i> ,	-	-	-	-	-	W. G. W. HARFORD.
<i>Ornithology</i> ,	-	-	-	-	-	WM. BLUNT.
<i>Entomology</i> ,	-	-	-	-	-	HENRY EDWARDS.
<i>Palæontology</i> ,	-	-	-	-	-	W. A. GOODYEAR.
<i>Mineralogy</i> ,	-	-	-	-	-	THEO. A. BLAKE.

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JOHN F. LEWIS.	

HONORARY MEMBERS.

NAME.	RESIDENCE.	ELECTED.
*AGASSIZ, LOUIS . . .	Cambridge, Mass. . .	1854, Feb. 13
BAIRD, SPENCER F. . . .	Washington, D. C. . .	1855, Jan. 22
BUNSEN, ROBERT	Heidelberg, Germany .	1870, Jan. 3
DANA, JAS. D.	New Haven, Conn. . .	1870, Jan. 3
DARWIN, CHARLES	Kent, England	1872, Jan. 2
EDWARDS, HENRY MILNE	Paris, France	1870, Jan. 3
EHRENBERG, CARL G. . .	Berlin, Prussia	1872, Jan. 2
ENGLEMAN, GEORGE . . .	St. Louis, Mo.	1870, Jan. 3

* Deceased.

GRAY, ASA	Cambridge, Mass.	1857, Mar. 23
HELMHOLTZ, H. L. F.	Berlin, Prussia	1870, Jan. 3
HENRY, JOSEPH	Washington, D. C.	1853, Sept. 19
HOOKE, J. D.	London, England	1870, Jan. 3
HUXLEY, T. H.	London, England	1870, Jan. 3
LEA, ISAAC	Philadelphia, Pa.	1853, June 13
MUELLER, FERDINAND	Melbourne, Victoria	1863, Oct. 19
PHILIPPI, RUDOLPH A.	Santiago, Chili	1864, Sept. 19
PEIRCE, BENJAMIN	Cambridge, Mass.	1870, Jan. 3
QUETELET, ADOLPHE J. L.	Brussels, Belgium	1856, July 28
STORER, DAVID H.	Boston, Mass.	1854, June 26
*TORREY, JOHN	New York, N. Y.	1857, Mar. 23
WHITNEY, J. D.	Cambridge, Mass.	1871, Jan. 2
WYMAN, JEFFRIES	Boston, Mass.	1870, Jan. 3

CORRESPONDING MEMBERS.

NAME.	RESIDENCE.	ELECTED.
ALDEN, J. M., U. S. N.	Washington, D. C.	1857, Mar. 10
ALEXANDER, W. D.	Honolulu, H. I.	1867, Oct. 21
ANDREWS, E. B.	Marietta, Ohio	1853, Nov. 7
ANTISELL, THOMAS, M. D.	Washington, D. C.	1855, Mar. 12
AYRES, W. O., M. D.	—, —	—, —
BALFOUR, J. H.	Edinburgh, Scotland	1867, May 6
BATES, HENRY WALTER	London, England	1867, May 6
BELCHER, W. C. S.	—, —	1868, Jan. 4
BIERSTADT, ALBERT	New York.	1873, Feb. 3
BIGELOW, J. M., M. D.	Detroit, Michigan	1854, May 1
BINNEY, W. G.	Burlington, N. J.	1863, Nov. 2
BLAKE, GORHAM	—, —	—, —

* Deceased.

BOURNE, W. O.	New York, N. Y.	1853, Nov. 7
BREVOORT, J. C.	Long Island, N. Y.	1870, Jan. 17
BRIDGES, ROBERT	Philadelphia, Pa.	1853, June 22
BRIGHAM, W. T.	Boston, Mass.	1864, April 18
BROWN, ROBERT	Edinburgh, Scotland	1867, March 2
BUDD, B. W.	New York, N. Y.	1854, Feb. 27
CALDBECK, J. B.	Singapore, E. I.	1867, May 6
CARPENTER, P. P.	Montreal, Canada	1863, Feb. 2
CHRISTIE, W. D.	———, ———	1868, Jan. 4
CLAYTON, JOSHUA E.	———, ———	1855, Nov. 26
COMRIE, P., M. D.	Victoria, Vancouver I.	1866, Sept. 17
CONDON, REV. THOMAS	Portland, Oregon	1870, Oct. 3
CONNOR, P. EDWARD	Utah	1854, Dec. 4
COPE, EDWARD D.	Haddington, N. J.	———, ———
CRAVERI, FREDERICO	Bra, Piedmont	1859, April 25
DAVIS, CHAS. F.	Lima, Peru	1872, Mar. 18
DAVIS, IRA, M. D.	Norwich, Vermont	1853, Aug. 22
*DELAFIELD, JOSEPH	New York, N. Y.	1853, June 20
DE LONG, HON. C. E.	Virginia, Nevada	1873, Feb. 3
DRAUPHING, ALEX.	San Sebastian	1863, Oct. 19
ESMARK, PROF LAU.	Christiana, Norway	1870, Oct. 3
FINSCH, OTTO	Bremen, Prussia	1873, Feb. 3
FLETCHER, MONTGOMERY P.	———, ———	1873, Jan. 7
FRAUENFELD, GEORGE T	Vienna, Austria	1857, Feb. 16
GARRETT, ANDREW	Paperte, Tahiti,	1857, May 12
*GIBBS, GEORGE,	Washington, D. C.	1857, Mar. 23
GILL, THEODORE	Washington, D. C.	———, ———
GIRARD, CHARLES	Paris, France	1855, Jan. 15
GIRD, RICHARD,	San Diego, Cal.	1874, Jan. 5
GLASS, LIEUT.-COM. HENRY	Washington, D. C.	1872, Nov. 7
GLASS, J. V. R.	Denver, Col.	1873, July 7
GOTTGETREN, RUDOLPH	Munich, Bavaria	1872, Feb. 19
GUNTHER, ALBERT, M. D.	London, England	———, ———
HALL, PROF. JAMES	Albany, N. Y.	1857, June 29
HASTINGS, MARSHALL	Guaymas, Mexico,	1873, ———
HASWELL, JAMES	Edinburgh, Scotland	1867, May 6
HATCH, P. L., M. D.	Minneapolis, Minn.	1874, Jan. 5
HEMPHILL, HENRY	San Diego, Cal.	1870, July 18
HILLEBRAND, WM., M. D.	Honolulu, H. I.	1865, March 6
HOBSON, J. W.	———, ———	———, ———
HODGES, A. D., JR.	———, ———	———, ———

*Deceased.

HORN, GEO. H.	Philadelphia, Pa.	1862, Feb. 27
HUBBARD, SAMUEL	———, England	1873, —
JACOBS, R. C.	Chihuahua, Mexico	1867, Jan. 21
JEWETT, EZEKIEL	Lockport, N. Y.	1868, April 6
KILGOUR, LAWRENCE	———, England	1873, —
KIRTLAND, J. P.	Cleveland, Ohio	1863, March 2
KLIPPART, JOHN	Columbus, Ohio	1865, May 15
*KONINCK, L. G. DE	Liege, Belgium	1857, July 28
LANSZWEERT, L.	———, Belgium	1857, July 28
LAPHAM, I. A.	Milwaukee, Wisconsin	———, —
LAWRENCE, GEO. N.	New York, N. Y.	1863, Nov. 2
LAWSON, J. S.	Olympia, Wash. Ter.	1871, Jan. 16
LE JOLI, AUGUSTE	Cherbourg, France	1855, June 25
*LE NORMAND, RENÉ	Vire, France	1855, Nov. 5
LE PLONGEON, AGUSTE, M. D.	Lima, Peru	———, —
LESQUEREUX, LEO.	Columbus, Ohio	1862, May 18
LINDEMAN, W.	Bremen, Prussia	1873, Feb. 3
LOEHR, FERDINAND VON	———, Germany	———, —
*MANN, HORACE	Boston, Mass.	1864, April 18
MARCOU, JULES	Paris, France	1862, Oct. 20
MARTIN, REV. DR. W. M. P.	Pekin, China	1873, Nov. 17
McCORMICK, R. C.	———, Arizona	1867, Jan. 21
McGOWAN, J., M. D.	———, China	1866, Aug. 6
MORRELL, DR. J.	Colima, Mexico	1871, Nov. 21
MORRELL, S. W.	Mazatlan, Mexico	1863, Oct. 19
*MURCHISON, R. I.	London, England	1867, May 6
MURRAY, ANDREW, M. D.	Edinburgh, Scotland	1859, April 25
PARRY, C. C., M. D.	Davenport, Iowa	1854, Feb. 27
PICKERING, CHARLES	Boston, Mass.	1853, June 20
POWERS, STEPHEN,	Sheridan, Cal.	1873, Oct. 20
PURDY, E. SPARROW	Cairo, Egypt	1872, April 1
PUTNAM, F. W.,	Salem, Mass.	1863, July 6
RICHTHOFEN, F. VON	Pekin, China	———, —
RIOS, DR. A. J.	Lima, Peru	1870, Sept. 19
RIOS, DR. MIGUEL	Lima, Peru.	———, —
SAUNDERS, MORTON W.	———, —	1872, Oct. 21
SCAMMON, CAPT. C. M.	Washington, D. C.	———, —
SCHENCK, CASPAR	———, —	1873, Jan. 7
SCHMIDT, L. C.	Eureka, Cal.	1867, Nov. 18

* Deceased.

SCLATER, PHILIP LUTLEY	London, England	1863, Ap'l 20
SELYS, LONGCHAMPS, ED.	Liege, Belgium	1857, July 28
SHUMARD, B. F.	St. Louis, Missouri	—, —
SMITH, JOHN ALEX., M. D.	Edinburgh, Scotland	1867, May 6
SPENCE, F. M.	Victoria, Vancouver I.	1863, Aug. 3
STEINDACHNER, FRANZ	Vienna, Austria	1873, May 19
STEVENSON, JOHN J.	—, —	—, —
STEWART, H. I.	—, —	1872, Oct. 21
*STIMPSON, WILLIAM, M. D.	Chicago, Illinois	1855, Nov. 5
STONE, CHARLES P.	—, —	1854, Oct. 16
SUCKLEY, GEORGE, M. D.	New York, N. Y.	1857, Mar. 23
SULLIVANT, W. S.	Columbus, Ohio	1863, May 18
SWALLOW, G. C.	Columbus, Missouri	1857, May 11
SWAN, JAMES G.	Neeah Bay, Wash. Ter.	1854, Feb. 27
TAYLOR, ALEX. S.	Santa Barbara, Cal.	1853, Sept. 19
THURBER, GEORGE	New York, N. Y.	1863, July 6
TROWBRIDGE, W. P.	New Haven, Conn	1854, Feb. 6
TRYON, GEORGE W., JR.	Philadelphia, Pa.	1862, Dec. 15
VAN BENEDEN, PIERRE J.	Louvain, Belgium	1857, July 28
*VEATCH, J. A.	Trinidad, Cal.	1855, July 30
VERHAEGHE, L.	Ostend, Belgium	1857, July 28
WALLACE, W. A.	Los Angeles, Cal.	1854, Aug. 7
WELLINGTON, G. E.	Aurora, Nevada	1864, Nov. 21
WETMORE, C. A.	Washington, D. C.	1873, —
WHEATLAND, HENRY, M. D.	Salem, Mass.	1857, Ap'l 11
WHITING, H. A.	—, —	1872, —
WIDEMANN, FRIEDERICH	Sinaloa, Mexico	1863, Oct. 19
WILLARD, ALEX.	Guaymas, Mexico	1873, Feb. 3
WILLIAMS, S. W., LL.D.	Pekin, China	1873, Nov. 17

LIFE MEMBERS.

NAMES.	RESIDENCE.	ELECTED.
†BLOOMER, H. G.	San Francisco, Cal.	1872, Jan. 15
BOSQUI, EDWARD	San Francisco, Cal.	1864, Nov. 12
BOSWELL, S. B.	San Francisco, Cal.	1872, Oct. 7
BOYD, JAS. THOS.	San Francisco, Cal.	1873, Mar. 17

* Deceased.

† Honorary Life Member.

BREED, H. L.	San Francisco, Cal.	1872, Oct. 7
BRERETON, ROBT. M.	San Francisco, Cal.	1873, Jan. 6
BRITTON, JOSEPH	San Francisco, Cal.	1860, —
BURLING, WM.	San Francisco, Cal.	1872, Oct. 27
CHAPMAN, W. S.	San Francisco, Cal.	1873, July 7
COIT, B. HOWARD	San Francisco, Cal.	1872, Nov. 4
COLTON, DAVID D.	San Francisco, Cal.	1874, Jan. 5
*COOPER, J. G., M. D.	San Francisco, Cal.	1867, Feb. 18
DEANE, COLL	San Francisco, Cal.	1873, Mar. 17
DONAHUE, PETER	San Francisco, Cal.	1872, Oct. 7
DONOHUE, JOSEPH A.	San Francisco, Cal.	1873, Nov. 3
EYRE, E. E.	San Francisco, Cal.	1873, Mar. 17
FLOYD, RICHARD H.	San Francisco, Cal.	1872, Nov. 4
GANSL, A. A.	San Francisco, Cal.	1873, Jan. 20
GATES, HORATIO S., M. D.	San Francisco, Cal.	1873, Sept. 1
GERSTLE, LEWIS	San Francisco, Cal.	1873, Sept. 15
GRAY, GEO. E.	San Francisco, Cal.	1874, Jan. 5
GREENWALD, SIMON	San Francisco, Cal.	1873, Sept. 15
HALL, EDWARD F.	San Francisco, Cal.	1872, Oct. 21
HARTSHORNE, BENJ. M.	San Francisco, Cal.	1868, Jan. 4
*HARFORD, W. G. W.	San Francisco, Cal.	1872, Jan. 15
HICKOX, GEORGE C.	San Francisco, Cal.	1873, Feb. 17
HILL, HORACE L.	San Francisco, Cal.	1873, Mar. 17
HITCHCOCK, C. M., M. D.	San Francisco, Cal.	1873, Dec. 1
HOLLISTER, W. W.	Santa Barbara, Cal.	1873, May 5
HOOPER, WM. B.	San Francisco, Cal.	1873, Mar. 17
JONES, HON. J. P.	Virginia, Nev.	1873, Mar. 17
*KELLOGG, ALBERT, M. D.	San Francisco, Cal.	1866, Ap'l 19
KOHL, WILLIAM	San Francisco, Cal.	1873, Oct. 6
*LICK, JAMES	Santa Clara, Cal.	1873, Feb. 17
LOCAN, F.	San Francisco, Cal.	1873, Mar. 17
McCREERY, A. B.	San Francisco, Cal.	1873, Oct. 20
McDONALD, J. M.	San Francisco, Cal.	1874, Jan. 5
McDONALD, MARK L.	San Francisco, Cal.	1873, Mar. 17
McDONALD, RICHARD H., M. D.	San Francisco, Cal.	1873, Mar. 17
MADDEN, THOS. P.	San Francisco, Cal.	1872, April 1
MARINA, E. J. DE STA.	San Francisco, Cal.	1873, Mar. 17
MARYE, GEORGE T., JR.	San Francisco, Cal.	1873, Jan. 20

* Honorary Life Member.

MEYER, WM.	San Francisco, Cal.	1872, Oct. 7
MILLS, D. O.	San Francisco, Cal.	1873, July 21
MOORE, H. H.	San Francisco, Cal.	1873, July 21
MORE, A. P.	Santa Barbara, Cal.	1873, May 5
*NEWHALL, H. M.	San Francisco, Cal.	1874, Jan. 5
OPPENHEIM, F.	San Francisco, Cal.	1872, Oct. 7
PALMER, JOSEPH C.	San Jose, Cal.	1856, Feb. 11
PARROTT, TIBURCIO	San Francisco, Cal.	1873, Jan. 20
†PIOCHE, F. L. A.	San Francisco, Cal.	1858, Feb. 22
RALSTON, W. C.	San Francisco, Cal.	1873, June 16
REY, JACQUES J.	San Francisco, Cal.	1860, —
ROBINSON, L. L.	San Francisco, Cal.	1873, Nov. 17
SATHER, PEDER	San Francisco, Cal.	1872, Nov. 4
SCOTT, IRVING M.	San Francisco, Cal.	1873, Aug. 18
SILLIMAN, PROF. BENJ.	New Haven, Conn.	1864, Dec. 18
SLOSS, LOUIS	San Francisco, Cal.	1873, Mar. 17
STANFORD, LELAND	San Francisco, Cal.	1873, Aug. 18
STEARNS, J. H.	San Francisco, Cal.	1873, Dec. 15
*STEARNS, ROBERT E. C.	San Francisco, Cal.	1873, Jan. 20
TRASK, J. B., M. D.	San Francisco, Cal.	1867, Jan. 7
WILKE, F. E.	San Francisco, Cal.	1873, Mar. 17
WILMERDING, J. C.	San Francisco, Cal.	1872, Oct. 7

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ADAMS, THOMAS
ALDRICH, W. A.
ALEXANDER, GEN. B. S.
ALLARDT, G. F.
ALVORD, WM.
ANDREWS, HARRY
ANDREWS, ROBT. W.
ANDROS, MILTON

ASHBURNER, WILLIAM
AUSTIN ALEX.
AVERY, B. P.
BACON, JACOB
BANKS, T. C.
BATES, C. M., M.D.
BAUER, J. A.

* Honorary Life Member.

† Deceased.

BEARD, E. L.
 BEHR, HERMAN, M.D.
 BELSHAW, M. W.
 BENNETT, THOS., M.D.
 BEST, JOHN T.
 BIGELOW, H. H.
 BISHOP, F. A.
 BLAKE, JAMES, M.D.
 BLAKE, THEODORE A.
 BLUMENBERG, J. H.
 BLUNT, WILLIAM
 BLUXOME, J., M.D.
 BLYTHE, T. H.
 BOLANDER, H. N.
 BONESTELL, L. H.
 BOOKER, WM. LANE
 BOOTH, HON. NEWTON
 BOWIE, H. P.
 BOWMAN, AMOS
 BRADY, JOHN T.
 BRIGHAM, CHAS. B., M.D.
 BROOKS, ELISHA
 BROWN, THOS. A. P.
 BROWN, JAMES T.
 BROWN, W. E.
 BRUCE, DONALD
 BUFFINGTON, J. M.
 BUGBEE, J. S.
 BURR, E. W.
 BUSH, R. J.
 BUTTON, O.

CADUC, PHILIP
 CAIRNS, JOHN
 CALVERT, WILLIAM, M.D.
 CARMANY, JOHN H.
 CARR, PROF. EZRA S.
 CARUSI, S. P.
 CHAMBERS, A. J.
 CHAPMAN, HENRY
 CHASE, A. W.
 COHN, ED.
 COLE, R. B., M.D.
 COLLIE, WM. H.
 COOPER, ABCHIBALD
 CORBETT, EDWARD W.

CORNWALL, P. B.
 COX, J. B.
 CRAVEN, ANDREW F.
 CURREY, JOHN, LL.D.
 CUTTER, H. F.

 DALL, W. H.
 DAMERON, JAMES P,
 DAVIDSON, PROF. GEO.
 DAVIS, A. McF.
 DAVIS, HORACE
 DAVIS, H. L.
 DAVIS, ISAAC E.
 DE CRANO, E. G.
 DEERING, MICHAEL
 DENISON, C. H.
 *DENNISON, E.
 DE TAVEL, A.
 DE TAVEL, J. C. H.
 DOBLE, ABNER
 DOOLAN, WM.
 DUPYTREN, J. B. PIGNE, M.D.
 DURAND, EMILE F.

EARL, JOHN O.
 EASTERBY, A. Y.
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 EDWARDS, HENRY
 ELDRIDGE, OLIVER
 ELFELT, ALFRED P.
 ELLINWOOD, C. N., M.D.
 ELLIS, B. F.
 ELOESSER, LEO
 *EVANS, ALBERT S.
 EVANS, O. P. .

FARRINGTON, E. D.
 FARWELL, J. D.
 FIELD, S. D.
 FISHER, WILLIAM J.
 FISKE, H. M., M.D.
 FORBES, A. B.
 FOSTER, W. H., JR.
 FORGEAUD, V. J., M.D.
 FRASER, E. J., M.D.
 FREEBORN, JAMES

* Deceased.

GEARY, JOHN F., M.D.
 GEDDES, CHARLES
 GIBBONS, H., M.D.
 GIBBONS, H., JR., M.D.
 GIBBES, C. D.
 GIBSON, REV. OTIS
 GILMAN, PROF. D. C.
 GODEFFROY, A.
 GOLDSMITH, SOLOMON
 GOODYEAR, W. A.
 GRAY, SAML. C.
 GRISAR, EMILE
 GROS, A.
 GUTZKOW, FREDK.

HAGGIN, LOUIS T.
 HAIGHT, H. H.
 HALEY, J. J.
 HANKS, HENRY G.
 HARKNESS, H. W., M.D.
 HARNEY, WILLIAM
 HARRISON, RALPH C.
 HART, GREGORY P.
 HASELTINE, A. A.
 HASTINGS, S. C.
 HAYES, WM.
 HEMME, A.
 HEWSTON, GEORGE, M.D.
 HEWSTON, JOHN, JR.
 HEYNEMANN, H.
 HIGHTON, H. E.
 HILLER, F., M.D.
 HOFFMAN, C. F.
 HOFMANN, J. A.
 HOLLADAY, S. W.
 HONCHARENKO, A.
 HOWELL, J. D.
 HUCKS, J. J.
 HUERNE, P.
 HUTCHINSON, D. S.
 HUTCHINSON, J. S.
 HYDE, HENRY C.

IRWIN, R. B.

JAMISON, J. S.

JANIN, HENRY
 JARBOE, J. R.
 JOICE, E. V.

KAEDING, CHAS. V. B.
 KELLER, HENRY
 KELLOGG, LEVI M.
 KIMBALL, HENRY

LADD, GEORGE S.
 *LANDER, P. C.
 LE CONTE, PROF. JOSEPH
 LEFFINGWELL, WILLIAM
 LETTE, GEORGE
 LEWIS, GEO. W.
 LEWIS, JOHN F.
 LIVERMORE, H. P.
 LIVERMORE, O.
 LOCKE, J. H.
 LOCKE, LEWIS
 LOCKINGTON, W. N.
 LORQUIN, E. F.
 LUNDBOURG, J. A. W., M.D.

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 McCHESNEY, J. B.
 McCLURE, DAVID
 McCORMICK, CHAS., M.D.
 McDONALD, M. J.
 MAYHEW, WM.
 MENDELL, COL. GEO. H.
 MICHAELS, HENRY
 MIDDLETON, S. P.
 MILLER, F. A.
 MILLER, JOHN F.
 MILLER, W. J.
 MOLERA, EUSEBIO J.
 MONTAGUE, W. W.
 MOOR, W. H.
 MORGAN, C. B.
 MOSS, J. MORA
 MUIR, JOHN
 MURDOCK, G. L.
 MURRAY, WILLIAM
 MUNSON, O. D.

* Deceased.

NELSON, REV. A. J.
 NELSON, THOMAS
 NORRIS, WILLIAM
 NORTHAM, E. F.

OGDEN, RICHARD L.

PAXSON, J. S.
 PAYOT, HENRY
 PERKINS, JOSEPH
 PERRY, JOHN, JR.
 PIERSON, J. D.
 PLUMMER, R. D., M.D.
 PRATT, O. C.
 PRICE, PROF. THOMAS
 *PRICHARD, W. P.

RANSOM, LEANDER
 RAYMOND, I. W.
 REYNOLDS, S. F.
 ROBINSON, J. C.
 ROBINSON ROBERT
 ROPER, JOURDAN W.
 RULOFSON, WILLIAM
 RUSSELL, W. W.

SAWYER, A. F., M.D.
 SAXE, A. W., M.D.
 SCHOFIELD, GEN. J. M.
 SCOTT, REV. A. W.
 SCUPHAM, J. R.
 SEARS, WILLIAM H.
 SELBY, THOMAS H.
 SMEDBERG, J. R.
 SMITH, BENJAMIN
 SMYTHE, J. H.
 SNYDER, J. R.
 SPRINGER, JASON
 STAPLES, D. J.
 STEBBINS, REV. HORATIO

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 STILLMAN, J. D. B., M.D.
 STOUT, A. B., M.D.
 STRETCH, R. H.
 *SWAIN, R. B.
 SWETT, DANIEL

TAYLOR, JOHN
 TESCHMACHER, H. F.
 THORNBERG, W. B.
 THROCKMORTON, S. R.
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 TURNER, MATTHEW
 TURRILL, C. B.

VON SCHMIDT, A. W.

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 WAIZMAN, MAX.
 WARNER, ABRAHAM
 WELLER, CHAS. L.
 WHEELER, ALFRED.
 WHITESIDES, C. H.
 WILLARD, J. F.
 WILLEY, JOHN M., M.D.
 WILLIAMS, REV. ALBERT
 WILLIAMS, ALBERT, JR.
 WILLIAMS, H. F.
 WILLIAMSON, COL. R. S.
 WILSON, SAMUEL M.
 WOODS, I. C.
 WOODWARD, R. B.
 WORMSER, ISAAC
 WYMAN, G. D.
 WYTHE, REV. DR. J. H.

YALE, CHARLES G.

* Deceased.

